Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. Canceled.

4. (Previously Presented) A method of processing a received signal, comprising:

receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

identifying a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

determining a desired demodulation type for use in demodulating the unknown block based on the known symbol values including estimating interferer signal characteristics for the known block and selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the unknown block based on the estimated interferer signal characteristics;

detecting an interferer signal characteristic discontinuity location in the unknown block; and

demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second, different selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

wherein interferer cancellation demodulation is selected for either the first selected demodulation type or the second selected modulation type and wherein demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second, different selected demodulation type on another portion of the unknown

block further comprises:

identifying known interferer signal symbols in the unknown block; and

updating estimates of interferer signal characteristics for use in interferer cancellation demodulation of at least a portion of the unknown block based on the identified known interferer signal symbols.

5. (Original) The method of Claim 4 wherein the interferer signal characteristic discontinuity comprises an interferer signal slot misalignment relative to a slot alignment of a desired signal component of the received signal.

6. (Previously Presented) A method of processing a received signal, comprising:

receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

identifying a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

determining a desired demodulation type for use in demodulating the unknown block based on the known symbol values including estimating interferer signal characteristics for the known block and selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the unknown block based on the estimated interferer signal characteristics;

detecting an interferer signal characteristic discontinuity location in the unknown block;

demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

identifying a second known block of the sequence of symbols containing known symbol values, the another portion of the unknown block being between the interferer signal characteristic discontinuity and the second known block;

determining a desired demodulation type for use in demodulating the another portion of the unknown block based on the known symbol values contained in the second known block by estimating interferer signal characteristics for the second known block and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics for the another portion of the unknown block;

wherein demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block comprises:

selecting the desired demodulation type for use in demodulating the unknown block as the first selected demodulation type and the desired demodulation type for use in demodulating the another portion of the unknown block as the second selected demodulation type; and

bi-directional demodulating the unknown block if either the first selected demodulation type or the second selected demodulation type is interferer cancellation demodulation.

7. (Original) The method of Claim 6 wherein demodulating the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on another portion of the unknown block further comprises selecting either uni-directional demodulation or bi-directional demodulation for the unknown block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation.

8. (Original) The method of Claim 7 wherein selecting either uni-directional

demodulation or bi-directional demodulation for the unknown block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation comprises:

selecting uni-directional demodulation if a difference between the signal characteristics of the known blocks satisfies a difference criterion; and

selecting bi-directional demodulation if the difference does not satisfy the difference criterion.

9. (Original) The method of Claim 8 wherein identifying a known block of the sequence of symbols containing known symbol values and identifying a second known block further comprises:

first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions; and

identifying ones of the re-encoded and modulated error corrected decoded bits as the first and second known block of the sequence of symbols containing known symbol values.

10. (Currently amended) The method of Claim [[3]] 4 wherein the estimated interferer characteristics include at least one characteristic selected from the group consisting of desired signal carrier power, noise power, interference, signal power or a ratio calculated based on ones of desired signal carrier power, noise power, interference and signal power.

11. (Currently amended) The method of Claim [[3]] 4 wherein a plurality of interferer signal characteristic discontinuities are detected in the unknown block and wherein demodulating the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected

demodulation type on another portion of the unknown block further comprises selecting a desired demodulation type to use between each of the detected interferer signal characteristic discontinuities based on the detected interferer signal characteristic discontinuities.

12. (Previously presented) A method of processing a received signal, comprising:

receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

identifying a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

determining a desired demodulation type for use in demodulating the unknown block based on the known symbol values including estimating interferer signal characteristics for the known block and selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the unknown block based on the estimated interferer signal characteristics;

detecting an interferer signal characteristic discontinuity location in the unknown block; and

demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

wherein identifying a known block of the sequence of symbols containing known symbol values further comprises:

first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of

symbol positions; and

identifying ones of the re-encoded and modulated error corrected decoded bits as at least one known block of the sequence of symbols containing known symbol values.

13. (Previously Presented) A method of processing a received signal comprising:

receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

partitioning the second sequence of symbols into a plurality of subfields, ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values;

determining the desired demodulation types for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of the subfields; and

demodulating the subfields using the respective determined desired demodulation types.

14. (Original) The method of Claim 13 wherein determining the desired demodulation type for use in demodulating the subfields further comprises selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the subfields.

15. (Original) The method of Claim 14 wherein determining a desired demodulation type for use in demodulating the subfields further comprises estimating

interferer signal characteristics for the ones of the subfields and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics.

16. (Original) The method of Claim 15 further comprising detecting an interferer signal characteristic discontinuity location in the sequence of symbols.

17. (Original) The method of Claim 16 wherein partitioning the sequence of symbols into a plurality of subfields further comprises partitioning the sequence of symbols into a plurality of subfields based on the detected interferer signal characteristic discontinuity location to position the detected interferer signal characteristic discontinuity location at a transition between ones of the subfields.

18. (Original) The method of Claim 16 wherein the interferer signal characteristic discontinuity location is in an identified one of the subfields and wherein determining the desired demodulation type for use in demodulating the subfields further comprises determining a first desired demodulation type for a first portion of the identified one of the subfields and a second desired demodulation type for a second portion of the identified one of the subfields, the first portion and the second portion being demarcated by the interferer signal characteristic discontinuity location.

19-22. Canceled.

23. (Previously Presented) A system for processing a received signal comprising:

a receiver that receives the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

an identification circuit that identifies a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

a determination circuit that determines a desired demodulation type for use in demodulating the unknown block based on the known symbol values;

a detector circuit that detects an interferer signal characteristic discontinuity location in the unknown block; and

a demodulator that demodulates the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

wherein the determination circuit is further configured to estimate interferer signal characteristics for the known block and selects the desired demodulation type based on the estimated interferer signal characteristics;

wherein the interferer signal characteristic discontinuity comprises an interferer signal slot misalignment relative to a slot alignment of a desired signal component of the received signal; and

wherein the demodulator is configured to perform a selected one of uni-directional demodulation or bi-directional demodulation.

24. (Original) The system of Claim 23 wherein the demodulator further comprises a multi-pass demodulator and wherein the identification circuit is configured to identify the known block based on symbol estimates generated by a first pass demodulation of the sequence of bits by the multi-pass demodulator.

25. (Currently amended) The system of Claim [[19]] 23 wherein the system comprises a mobile terminal.

26. (Currently amended) The system of Claim [[19]] 23wherein the system comprises a base station transceiver.

27. (Previously Presented) A system for processing a received signal comprising:

a receiver that receives the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

a first pass demodulator/decoder that first pass demodulates and decodes the sequence of symbols to provide error corrected decoded bits;

a re-encoder circuit that recodes and modulates the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

a partition circuit that partitions the second sequence of symbols into a plurality of subfields, ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values;

a determination circuit that determines the desired demodulation types for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of the subfields; and

a second pass demodulator that demodulates the subfields using the respective determined desired demodulation types.

28. (Original) The system of Claim 27 wherein the first pass demodulator and the second pass demodulator comprise a multi-pass demodulator.

29. (Original) The system of Claim 27 wherein the desired demodulation type is selected from the group consisting of non-interferer cancellation and interferer cancellation.

30. (Original) The system of Claim 29 wherein the system further comprises a detector circuit that detects an interferer signal characteristic discontinuity location in the sequence of symbols.

31. (Original) The system of Claim 30 wherein the partition circuit partitions the sequence of symbols into a plurality of subfields so as to position a detected interferer signal characteristic discontinuity location at a transition between ones of the subfields.

32. (Original) The system of Claim 27 wherein the system comprises a mobile terminal.

33. (Original) The system of Claim 27 wherein the system comprises a base station transceiver.

34-36. Canceled.

37. (Previously Presented) A system for processing a received signal, comprising:

means for receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

means for identifying a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

means for determining a desired demodulation type for use in demodulating the unknown block based on the known symbol values including means for estimating interferer signal characteristics for the known block and selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the unknown block based on the estimated interferer signal characteristics;

means for detecting an interferer signal characteristic discontinuity location in the unknown block; and

means for demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second, different selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second

selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

wherein interferer cancellation demodulation is selected for either the first selected demodulation type or the second selected modulation type and wherein the means for demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second, different selected demodulation type on another portion of the unknown block further comprises:

means for identifying known interferer signal symbols in the unknown block; and

means for updating estimates of interferer signal characteristics for use in interferer cancellation demodulation of at least a portion of the unknown block based on the identified known interferer signal symbols.

38. (Original) The system of Claim 37 wherein the interferer signal characteristic discontinuity comprises an interferer signal slot misalignment relative to a slot alignment of a desired signal component of the received signal.

39. (Previously Presented) A system for processing a received signal, comprising:

means for receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

means for identifying a known block of the sequence of symbols containing known symbol values and an unknown block of the sequence of symbols containing unknown symbol values;

means for determining a desired demodulation type for use in demodulating the unknown block based on the known symbol values including means for estimating interferer signal characteristics for the known block and selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the unknown block based on the estimated interferer signal characteristics;

means for detecting an interferer signal characteristic discontinuity location in the

unknown block; and

means for demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block, the first selected demodulation type and the second selected demodulation type being selected based on the determined desired demodulation type for use in demodulating the unknown block and the detected interferer signal characteristic discontinuity;

means for identifying a second known block of the sequence of symbols containing known symbol values, the another portion of the unknown block being between the interferer signal characteristic discontinuity and the second known block;

means for determining a desired demodulation type for use in demodulating the another portion of the unknown block based on the known symbol values contained in the second known block by estimating interferer signal characteristics for the second known block and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics for the second known block;

wherein the means for demodulating the unknown block using a first selected demodulation type on a first portion of the unknown block and a second selected demodulation type on another portion of the unknown block comprises:

means for selecting the desired demodulation type for use in demodulating the unknown block as the first selected demodulation type and the desired demodulation type for use in demodulating the another portion of the unknown block as the second selected demodulation type; and

means for bi-directional demodulating the unknown block if either the first selected demodulation type or the second selected demodulation type is interferer cancellation demodulation.

40. (Original) The system of Claim 39 wherein the means for demodulating the unknown block using a first selected demodulation type between the interferer signal characteristic discontinuity and the known block and a second selected demodulation type on

another portion of the unknown block further comprises means for selecting either uni-directional demodulation or bi-directional demodulation for the unknown block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation.

41. (Original) The system of Claim 40 wherein the means for selecting either uni-directional demodulation or bi-directional demodulation for the unknown block based on a signal characteristic of the first known block and a signal characteristic of the second known block if the first selected demodulation type and the second selected demodulation type are non-interferer cancellation demodulation comprises:

means for selecting uni-directional demodulation if a difference between the signal characteristics of the known blocks satisfies a difference criterion; and

means for selecting bi-directional demodulation if the difference does not satisfy the difference criterion.

42. (Original) The system of Claim 41 wherein the means for identifying a known block of the sequence of symbols containing known symbol values and identifying a second known block further comprises:

means for first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

means for recoding and modulating the error corrected decoded bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions; and

means for identifying ones of the re-encoded and modulated error corrected decoded bits as the first and second known block of the sequence of symbols containing known symbol values.

43. (Previously Presented) A system for processing a received signal comprising:

means for receiving the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;

means for first pass demodulating and decoding the sequence of symbols to provide error corrected decoded bits;

means for recoding and modulating the error corrected decode bits to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

means for partitioning the second sequence of symbols into a plurality of subfields, ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values;

means for determining the desired demodulation types for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of the subfields; and

means for demodulating the subfields using the respective determined desired demodulation types.

44. (Original) The system of Claim 43 wherein the means for determining the desired demodulation type for use in demodulating the subfields further comprises means for selecting either non-interferer cancellation or interferer cancellation demodulation as the desired demodulation type for use in demodulating the subfields.

45. (Original) The system of Claim 44 wherein the means for determining a desired demodulation type for use in demodulating the subfields further comprises means for estimating interferer signal characteristics for the ones of the subfields and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics.

46. (Original) The system of Claim 45 further comprising means for detecting an interferer signal characteristic discontinuity location in the sequence of symbols.

47. (Original) The system of Claim 46 wherein the means for partitioning the sequence of symbols into a plurality of subfields further comprises means for partitioning the sequence of symbols into a plurality of subfields based on the detected interferer signal characteristic discontinuity location to position the detected interferer signal characteristic discontinuity location at a transition between ones of the subfields.

48. (Original) The system of Claim 47 wherein the means for determining a desired demodulation type for use in demodulating the subfields further comprises means for estimating interferer signal characteristics for the ones of the subfields and selecting either non-interferer cancellation or interferer cancellation demodulation based on the estimated interferer signal characteristics.